Update this Quiz

Info   Results   Preview   Edit

202301UECM1404OE2a

Start again

Review of preview

Started on	Wednesday, 22 February 2023, 09:46 PM
Completed on	Wednesday, 22 February 2023, 09:47 PM
Time taken	17 secs
Grade	**0** out of a maximum of 10 (**0**%)

1

Marks: 1

At an annual effective interest rate of 6.3%, an annuity-immediate with 4n level annual payments of 1000 has present value of 14,794. Determine the fraction of the total present value represented by the first set of N payments and third set of N payments combined. _____

Answer: [   ] ✗

Make comment or override grade

Incorrect
Correct answer: 0.661942
Marks for this submission: 0/1.

2

Marks: 1

Allan deposits 120 at the end of each year for 20 years into a fund earning an annual effective interest rate of 6%.
Becky makes 20 deposits into a fund at the end of each year year for 20 years. The first 10 deposits are 120 each, while the last 10 deposits are 120 + Y each. The fund earns an annual effective interest rate of 7% during the first 10 years and 5% annual effective interest thereafter.
At the end of 20 years, the amount in Allan's fund equals the amount in Becky's fund.
Calculate Y. _____

Answer: [   ] ✗

Make comment or override grade

Incorrect
Correct answer: 16.239549
Marks for this submission: 0/1.

3

Marks: 1

Steven have a 30-year 150,000 mortgage with an 6% interest rate convertible monthly. Payments are made at the end of the month. Immediate after the 120th payment, he refinance the mortgage. The interest rate is reduced to 4.5%, convertible monthly, and the term is reduced to 20 years (so there are 10 years of payments remaining). He also make an additional payment of 20,000 at the time of refinancing. Calculate his new monthly payment. _____

Answer: [   ] ✗

Make comment or override grade

Incorrect
Correct answer: 1093.681488
Marks for this submission: 0/1.

4

Marks: 1

Deposits of 100 are made every month for 5 years into an account crediting interest at a nominal rate of 9% convertible monthly. Starting one month after the last deposit, monthly withdrawals of X are made for 10 years, exhausting the account. Determine X. _____

Answer: [   ] ✗

Incorrect
Correct answer: 95.54
Marks for this submission: 0/1.

---

5 📝
Marks: 1

Tom borrows 100 at an annual effective interest rate of 4% and agrees to repay it with 30 annual installments. The amount of each payment in the last 20 years is set at twice that in the first 10 years. At the end of 10 years, Tom has the option to repay the entire loan with a final payment X, in addition to the regular payment. This will yield the lender an annual effective rate of 4.5 over the 10-year period. Calculate X. _____

Answer: [   ] ✗

Incorrect
Correct answer: 108.88
Marks for this submission: 0/1.

---

6 📝
Marks: 1

Ellyn plans to accumulate 103,000 at the end of 50 years. She makes the following deposits:

- X at the beginning of years 1-30;
- No deposits at the beginning of years 31-40, and
- Y at the beginning of years 41-50.

The annuity effective interest rate is 8%

$$X - Y = 103$$

Calculate Y. _____

Answer: [   ] ✗

Incorrect
Correct answer: 75.550071
Marks for this submission: 0/1.

---

7 📝
Marks: 1

Mark receives 560,000 at his retirement. He invests 560,000-X in an annual payment 19-year annuity-immediate and X in an annual payment perpetuity-immediate. His total annual payments received during the first 19 years are twice as large as those received thereafter. the annual effective rate of interest is 6%. Calculate X. _____

Answer: [   ] ✗

Incorrect
Correct answer: 335432.582244
Marks for this submission: 0/1.

---

8 📝
Marks: 1

Kenton borrows 320,000 on January 1, 2023 to be repaid in 24 semiannual annual installments at an effective annual rate of interest of 8%. The first payment is due on July 1, 2023. Instead of semiannual payment he decides to make monthly payments equal to one-sixth of the semiannual payment beginning on February 1, 2023. Determine how many months will be needed to pay off the loan. _____

Answer: [   ] ✗

Incorrect
Correct answer: 140.337235
Marks for this submission: 0/1.

---

9 📝
Marks: 1

You took a loan of 200,000 which required to pay 45 equal annual payments at 12% interest. The payments are due at the end of each year. The bank sold your loan to an investor immediately after receiving your 9th payment. With yield to the investor of 6%, the price the investor pay was 353,057. Determine the bank's overall return on its investment. _____

Answer: [   ] ✗

Incorrect
Correct answer: 0.1637
Marks for this submission: 0/1.

10
Marks: 1

Annual deposits of 110 are made at the beginning of each year for 19 years. Find the accumulated value at the end of 19 years if the effective rate of interest is 11% for the first 9 years and 10% for the last 10 years. _____

Answer: [   ] ✗

Incorrect
Correct answer: 5633.619085
Marks for this submission: 0/1.

UECM1404-202301-EZZ